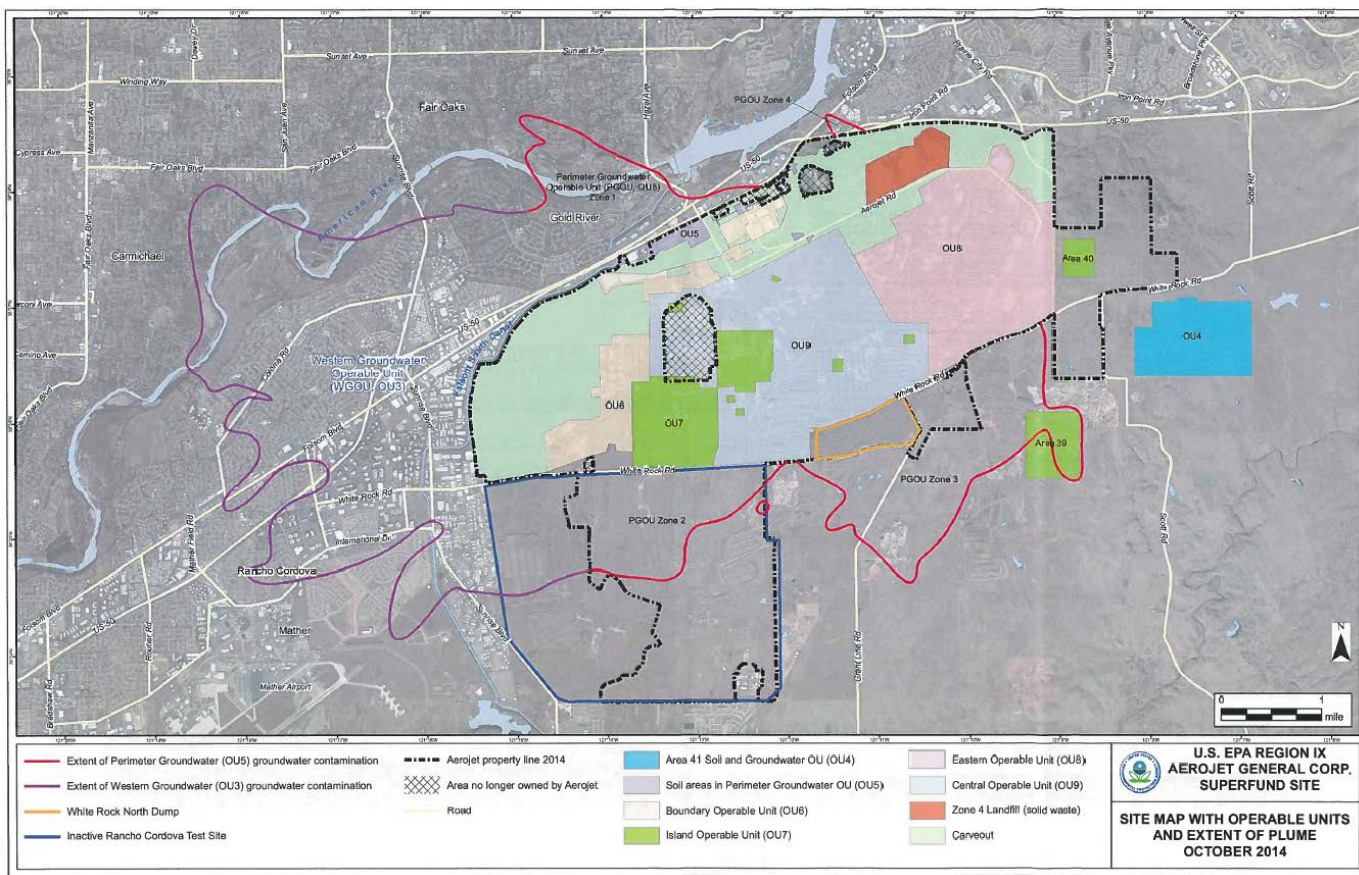




# C41 Land Use Covenant (LUC)

Aerojet Superfund Site  
Perimeter Groundwater Operable Unit

November 18, 2015



# Aerojet Site Map with OUs

# Location of C41





## LUCs for PGOU

- LUCs for No Action Areas C10, C14, C15, C29, C32, and Sites D(e), 4D, 5D, 36D, 37D, 39D and GET D.
- LUCs for vapor mitigation sites 7D, FCS, and 33D.
- LUCs for Remedial Action Completion sites 10D, 11D, C4, C41 (this one!).

*Subject to current risk/hazard standards.*

**PGOU Sites subject to LUCs based on Selected Remedy**



## Remediation Activities

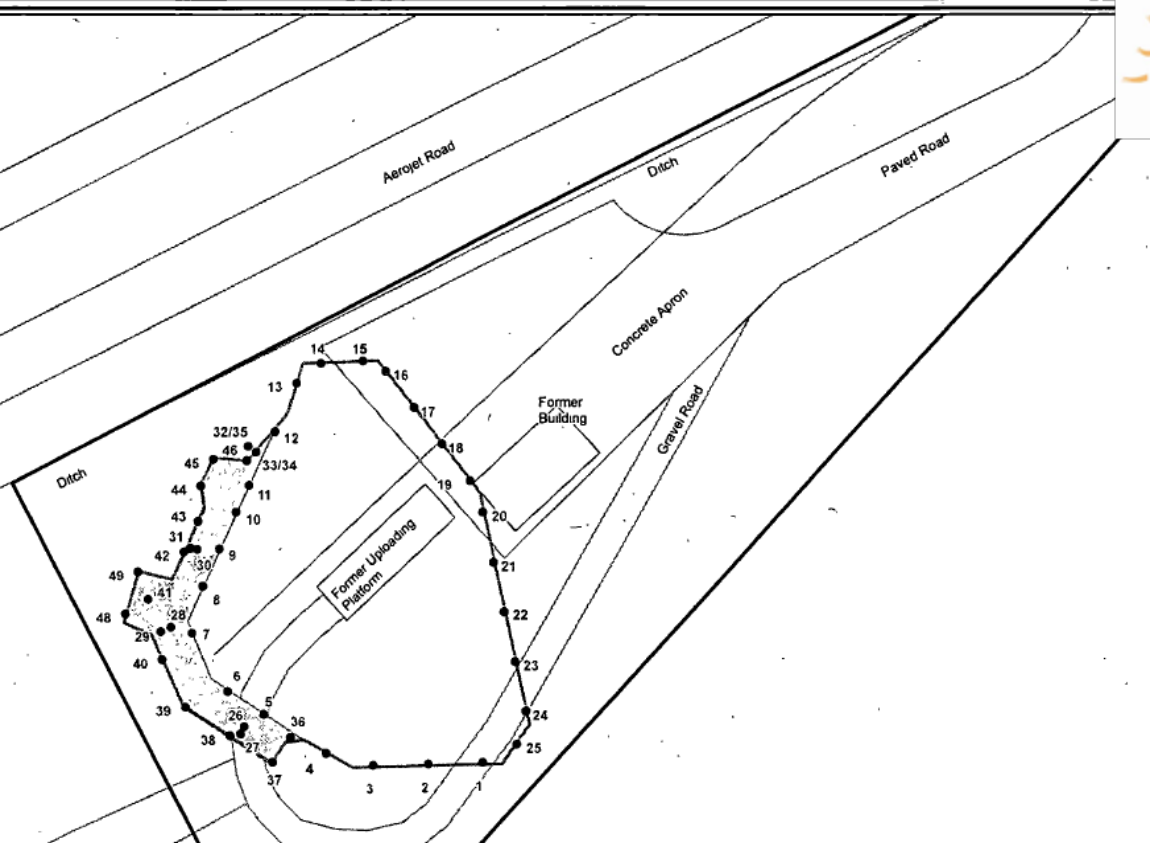
- C41 is 1.7 acres.
- Perchlorate in soil.
- 523 truckloads used to transport 12,477 tons of soil  $> 0.060$  mg/kg to the landfill.
- Backfill with borrow material from Area 37 in Zone 3.
- Borrow material suitable based on geotechnical and environmental assessment completed in May 2012.
- Final Remedial Action Report Area C41 dated June 17, 2013.

## C41 Remediation Activities



# 10-Foot Soil Perchlorate Results

Point ID	Sample ID	Result
1	C41-PGEX-1-10	<49
1	C41-PGEX-1-10-D	<48
2	C41-PGEX-2-10	<46
3	C41-PGEX-3-10	<44
4	C41-PGEX-4-10	<45
12	C41-PGEX-12-10	<51
13	C41-PGEX-13-10	<46
14	C41-PGEX-14-10	<47
14	C41-PGEX-14-10-D	<46
15	C41-PGEX-15-10	<46
15	C41-PGEX-15-10-D	<45
16	C41-PGEX-16-10	<48
17	C41-PGEX-17-10	<47
18	C41-PGEX-18-10	<45
19	C41-PGEX-19-10	<47
20	C41-PGEX-20-10	<47
21	C41-PGEX-21-10	<45
22	C41-PGEX-22-10	<46
23	C41-PGEX-23-10	48
24	C41-PGEX-24-10	<48
25	C41-PGEX-25-10	<45
36	C41-PGEX-36-10	<45
36	C41-PGEX-36-10-D	<45
37	C41-PGEX-37-10	<44
38	C41-PGEX-38-10	<47
39	C41-PGEX-39-10	<47
40	C41-PGEX-40-10	<44
42	C41-PGEX-42-10	<45
43	C41-PGEX-43-10	<47
44	C41-PGEX-44-10	<47
45	C41-PGEX-45-10	<43
46	C41-PGEX-46-10	<46
48	C41-PGEX-48-10	<47
49	C41-PGEX-49-10	<50



## Explanation

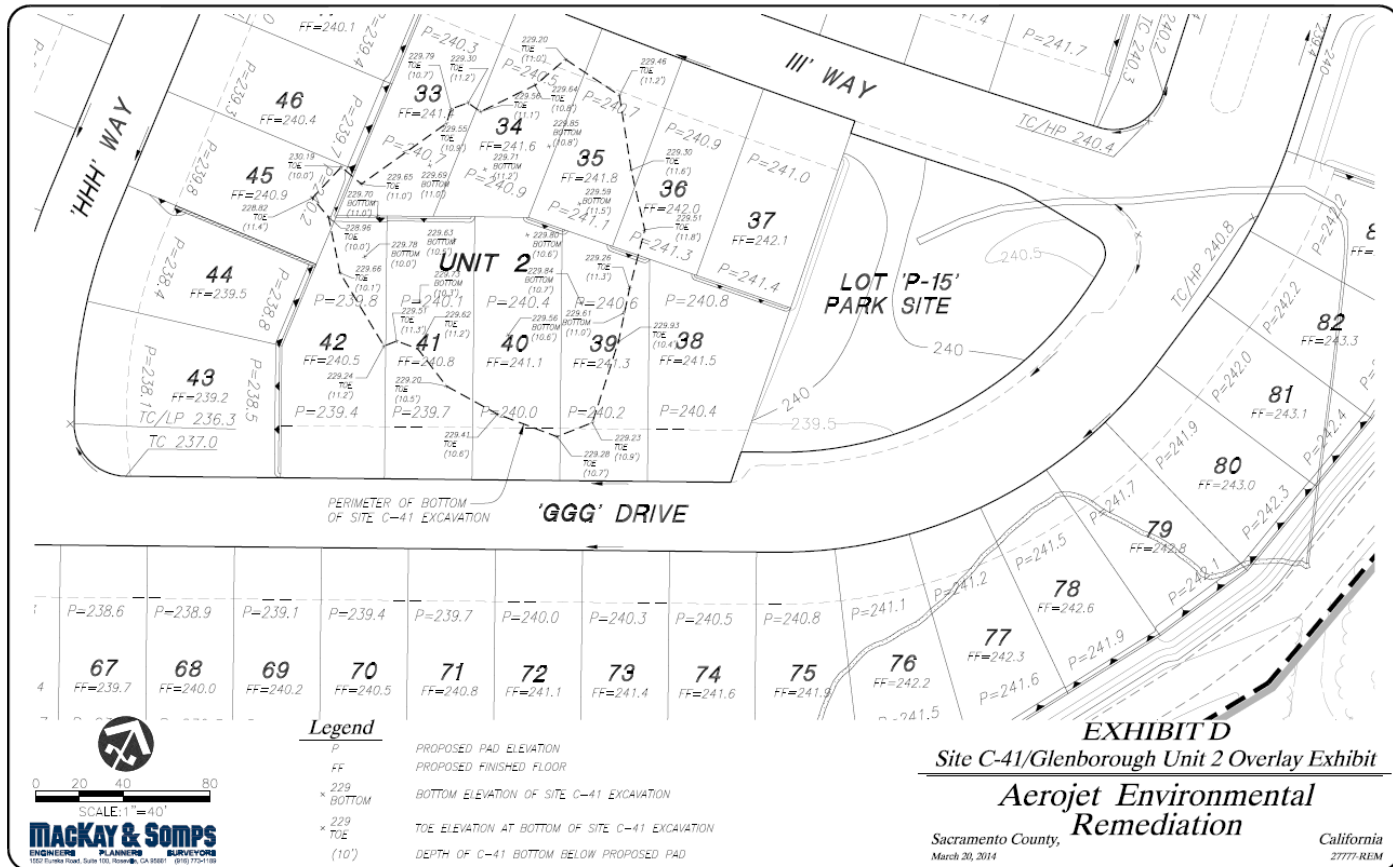
- Approximate Limit of Excavation Area
  - 39 10-Foot Deep Soil Confirmation Sample Locations
  - Area C41 Boundary
- Notes: Results in  $\mu\text{g/kg}$  (dry weight).  
 Varied reporting limits due to soil moisture correction.  
 Sample points 5-11, 26-35, and 41 are in over excavated area (see Table 3-1)



TITLE Post Excavation Limits and 10-ft Soil Confirmation Sample Results			
LOCATION Area C41-Penmeter Groundwater Operable Unit (OU-5) Aerojet Superfund Site			
CVEI CENTRAL VALLEY ENVIRONMENTAL, INC.	CHECKED	ASP	FIGURE 3-2
	DRAFTED	TCL	
	FILE	DATE 05/27/13	

P:\AEROJET\Aerojet GIS\PGOU\RS-RA-501\C41-501-Excavation-10ft-Results.mxd

# C41 Post Excavation Results



# Exhibit D of LUC





## Statute and Regulatory Authority

- Required when contaminants will remain on Property above unrestricted use levels.
- Prohibit land uses and prohibit activities that could result in human exposure or contaminant releases.
- For NPL, between Property Owner, DTSC and RWQCB w/USEPA third party beneficiary.

**LUC Authority**





## Key Components

- Covenantor and Agencies identified.
- Statement of facts.
- Definitions of terms.
- General Provisions
  - runs with land;
  - binding upon Owners and Occupants;
  - incorporation into deeds and leases;
  - conveyance of property;
  - payment of costs for administering LUC

# C41 LUC Key Components



## Key Components (continued)

- Restrictions and Requirements
  - Prohibited activities related to groundwater (no extraction, no recharge, no injection);
  - Soil Management Plan approval needed for soil disturbance at or below 10 feet of ground surface;
  - Agencies access and access for party performing O&M;
  - Prioritization for groundwater remediation components;
  - Owner Annual Inspections and reports to verify Compliance;
  - Property Owner Association exception.
- Enforcement
- Variance, Removal, and Term.
- Miscellaneous Provisions.
- Exhibits

# C41 LUC Key Components



## Property Owner Association (or HOA) exception

- If POA established and incorporated satisfactorily;
- Undertake all obligations of the property owner;
- Enters into agreement with Contracting State Agency;
- Quarterly electronic reporting of current property ownership information;
- Establishes financial assurance for complying;
- Financial assurance for retention of consultants to perform LUC activities;
- LUC inspection and reporting activities in place of property owners;
- Notices to cure noncompliance;
- Cost reimbursement.

## Property Owner Association Variation

## Land Use Covenant Agreements, October 2000 – Overview



<http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/upload/luc-fact-sheet-10-00.pdf>

- Recorded Land Use Covenants, April 2003 – Discusses requirement for DTSC to maintain listing of land use covenants

[http://www.dtsc.ca.gov/SiteCleanup/upload/SMBR\\_FS\\_AB2436.pdf](http://www.dtsc.ca.gov/SiteCleanup/upload/SMBR_FS_AB2436.pdf)

## LUC Fact Sheets



- C41 requires signatures and recording;
- C29 and 10D received by Agencies;
- Identify variations that may be necessary for other type of LUCs (e.g. vapor mitigation);
- Upon completion and recording of all LUCs, PGOU soil ICs considered complete;
- Potential partial deletion of PGOU sites from the NPL.

## What's Next?



**Questions?**